

What is claimed is:

1. A microfluidic device for analyzing a sample, comprising:

a base member;

a separating channel formed in the base member;

5 a sample injecting portion formed at one end of the separating channel;

a sample quantity control channel formed in the base member and branching from the separating channel, said sample quantity control channel having a volume for the sample to be introduced;

10 a first opening and closing mechanism disposed at the other end of the separating channel; and

a second opening and closing mechanism disposed at one end of the sample quantity control channel away from the separating channel.

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2. A microfluidic device as claimed in claim 1, further comprising a projection projecting from the base member to communicate with the separating channel, and having a distal end forming the sample injecting portion.

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3. A microfluidic device as claimed in claim 2, wherein said base member includes a lower surface from which said projection projects, and an upper surface having an opening for the other end of the separating channel and an opening for the one end of the sample quantity control channel, said first and second opening and closing mechanisms being disposed in the respective openings.

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4. A microfluidic device as claimed in claim 1, wherein said first and second opening and closing mechanisms are valves.

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5. A microfluidic device as claimed in claim 1, wherein said base member is formed of first and second plates laminated together.

5 6. An analyzing method for analyzing a sample, comprising the steps of:

filling a migration buffer in a separating channel;

10 introducing the sample into the separating channel from a sample injecting portion for an amount corresponding to a volume of a sample quantity control channel branching from the separating channel; and

applying a voltage between the sample injecting portion and an end of the separating channel away from the sample injecting portion so that the sample is separated by an electrophoresis.

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7. An analyzing method as claimed in claim 6, wherein said step of filling the migration buffer is performed by closing a first closing mechanism formed at an end of the separating channel away from the sample injecting portion, and closing a second closing mechanism at the sample quantity control channel located away from the separating channel; and said step of introducing the sample is performed by immersing the sample injecting portion in the sample, and opening the second closing mechanism; after closing the second closing mechanism, the step of applying the voltage is performed.

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